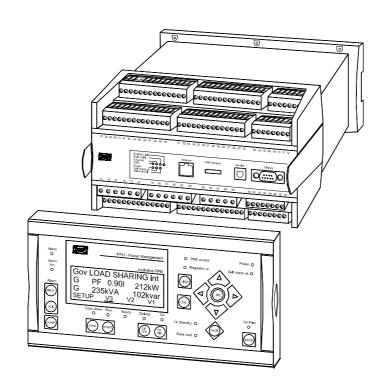
# Description of options



# Option M18, Configurable I/O extension cards 4 relay outputs PPU Power Management (PPM)

4189340420A SW version 2.5X.X



- Description of option
- Functional description
- Parameter list





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# 1. Warnings and legal information

#### Legal information and responsibility

DEIF takes no responsibility for installation or operation of the generator set. If there is any doubt about how to install or operate the generator set controlled by the unit, the company responsible for the installation or the operation of the set must be contacted.

The units are not to be opened by unauthorised personnel. If opened anyway, the warranty will be lost.

## **Electrostatic discharge awareness**

Sufficient care must be taken to protect the terminals against static discharges during the installation. Once the unit is installed and connected, these precautions are no longer necessary.

#### Safety issues

Installing the unit implies work with dangerous currents and voltages. Therefore, the installation should only be carried out by authorised personnel who understand the risks involved in working with live electrical equipment.



Be aware of the hazardous live currents and voltages. Do not touch any AC measurement inputs as this could lead to injury or death.

#### **Definitions**

Throughout this document a number of notes and warnings will be presented. To ensure that these are noticed, they will be highlighted in order to separate them from the general text.

#### **Notes**



The notes provide general information which will be helpful for the reader to bear in mind.

#### Warning



The warnings indicate a potentially dangerous situation which could result in death, personal injury or damaged equipment, if certain guidelines are not followed.

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# 2. Description of option

# M18 option

Function	ANSI no.
4 x configurable relay outputs for alarms or limit switches	74

# **Terminal description**

Term.	Function	Technical data	Description
90	NO	Relay 14	Configurable
91	Com.	250V AC/8A	
92	NO	Relay 15	Configurable
93	Com.	250V AC/8A	
94	NO	Relay 16	Configurable
95	Com.	250V AC/8A	_
96	NO	Relay 17	Configurable
97	Com.	250V AC/8A	

The above relay numbers are to be used when selecting the specific relay.

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### 3. Functional description

#### Relay setup

The relays can be configured in two different ways as illustrated below.

#### Alarm relay function

When an alarm activates the relay, it will remain activated for as long as the alarm is present and unacknowledged.

#### Alarm sync. block relay function

When an alarm activates the relay, it will remain activated for as long as the alarm is present and unacknowledged. When the relay is activated, the synchronisation of the breaker is blocked, while the regulation is still active.

#### **Limit function**

When an alarm activates the relay, no alarm message is displayed. After the condition activating the relay has returned to normal, the relay will deactivate, when the 'Off delay' has expired.

#### Alarm/Reset relay function

Like 'Alarm', but with short-time reset if the relay is ON and another alarm tries to activate the relay. Time duration of relay OFF is made under DEL.

#### Alarm sync. block/Reset relay function

Like 'Alarm + sync. block', but with short-time reset if the relay is ON and another alarm tries to activate the relay. Time duration of relay OFF is made in 'Off delay' under DEL.

The setup of the relay is done in the I/O menu ('OUT' menu). All relays are set up in the same way. This example illustrates relay 14:

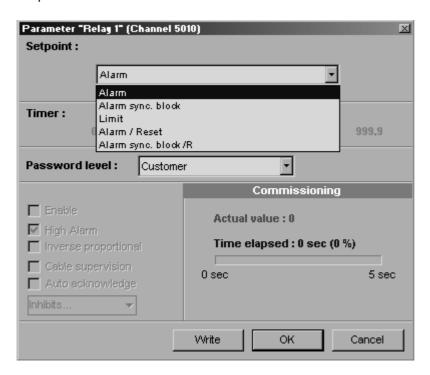
No.	Setting		First/min. setting	Second/max. setting	Factory setting
5140	Relay 14	Selection display	-	-	-
5141	Relay 14	Function	Alarm	Alarm sync. block/reset	Alarm
5142	Relay 14	Off delay	0.0 s	999.9 s	5.0 s

The 'Off delay' is the time between the disappearance of the event that caused the relay to activate and the actual deactivation of the relay.

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### PC utility software

The PC utility software is a Windows® based software, which can be downloaded from our website <a href="www.deif.com">www.deif.com</a>. To adjust the inputs via the PC utility software, a computer must be connected to the controller unit. Furthermore, the unit parameters must be uploaded to the computer.



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# 4. Parameter list



For further information about the structure of the parameter descriptions, please see the Designer's Reference Handbook.

# 5140 Relay 14

No.	Setting		First/min. setting	Second/max. setting	Factory setting
5140	Relay 14	Selection display	-	-	-
5141	Relay 14	Function	Alarm	Alarm sync. block/reset	Alarm
5142	Relay 14	Off delay	0.0 s	999.9 s	5.0 s

# 5150 Relay 15

No.	Setting		First/min. setting	Second/max. setting	Factory setting
5150	Relay 15	Selection display	-	-	-
5151	Relay 15	Function	Alarm	Alarm sync. block/reset	Alarm
5152	Relay 15	Off delay	0.0 s	999.9 s	5.0 s

# 5160 Relay 16

No.	Setting		First/min. setting	Second/max. setting	Factory setting
5160	Relay 16	Selection display	-	-	-
5161	Relay 16	Function	Alarm	Alarm sync. block/reset	Alarm
5162	Relay 16	Off delay	0.0 s	999.9 s	5.0 s

# 5170 Relay 17

No.	Setting		First/min. setting	Second/max. setting	Factory setting
5170	Relay 17	Selection display	-	-	=
5171	Relay 17	Function	Alarm	Alarm sync. block/reset	Alarm
5172	Relay 17	Off delay	0.0 s	999.9 s	5.0 s

DEIF A/S reserves the right to change any of the above

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